

CHAPTER 3

EIR Text Revisions

3.1 Introduction

The following corrections and/or clarifications have been made to the FEIR text. These corrections include: minor corrections made by the section authors to improve writing clarity, grammar, and consistency; corrections or clarifications resulting from a specific response to comments; or staff-initiated text changes to update information presented in the DEIR. The text revisions are organized by the chapter and page number that appear in the DEIR. Deleted text presented in this section indicates text that has been deleted from the DEIR. Text that has been added to this FEIR is presented as double underlined.

3.2 Text Revisions

Chapter S, Summary

As a staff-initiated text change, DEIR page S-7 (Mitigation Measure 3.3-1) has been revised:

Measure 3.3-1: EBMUD will install interpretive signage to explain the engineering and environmental principles related to the seismic improvements underway at San Pablo Dam. The interpretive material will be presented in an attractive and easy to understand graphic display. With EPRPD approval, sSignage locations could include, but would not be limited to, areas near the Kennedy Grove entry kiosk and trails.

In response to Comment C-2, DEIR page S-9 (Mitigation Measure 3.6-1d) has been revised:

Measure 3.6-1d: EBMUD will develop and implement a five-year tree monitoring program for upland species and a ten-year monitoring program for riparian species. Appropriate performance standards may include, but are not limited to: an 80 75 percent survival rate of tree plantings and the demonstrated ability to be self-sustaining at the end of five years for upland species and ten years for riparian species.

In Response to Comments C-3, DEIR page S-11 (Mitigation Measure 3.6-2b) has been revised:

EBMUD will compensate for wetland and stream impacts in the construction area downstream of San Pablo Dam at a ratio of 2:1 (or at a ratio agreed upon by the wetland permitting agencies) by creating or restoring wetland and aquatic habitat at an agency-approved location on nearby EBMUD lands. EBMUD will develop and implement a five-year wetland mitigation and monitoring program for onsite and offsite mitigation. Appropriate performance standards may include, but are not limited to: an 80 75 percent

survival rate of restoration plantings; absence of invasive plant species; and a viable, self-sustaining creek or wetland system at the end of five years.

In response to Comment A-2, DEIR page S-15 (Mitigation Measure 3.6-6) has been revised:

Measure 3.6-6: EBMUD will ensure that construction-related impacts to individual Alameda whipsnakes are minimized and/or avoided through the development and implementation of an Alameda whipsnake protection and monitoring plan. This plan will be approved by CDFG during CESA consultation and by the USFWS during formal consultation under Section 7 of FESA and will establish a program of preconstruction surveys and construction supervision to identify and prevent potential hazards to individual Alameda whipsnakes that could be present during construction. The plan will prohibit or restrict activities that could harm or harass this species. Habitat restoration and compensation is also included in the plan. Measures in this plan will include, but are not limited to, the following:

In response to Comment I-17, DEIR pages S-23 and S-24 (Mitigation Measure 3.11-3) has been revised:

Measure 3.11-3a: Regulations governing the use of construction equipment in fire-prone areas are designed to minimize the risk of wildland fires during construction activity. In accordance with the Public Resources Code, the construction contractor would be required to comply with the following legal requirements during construction activities for the proposed project:

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period – from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

Measure 3.11-3b: EBMUD will coordinate fire protection needs during project construction with local fire protection agencies, which could include the Contra Costa County Fire Protection District, the Richmond Fire Department, and the Moraga-Orinda Fire District.

Significance after Mitigation: Less-than-significant.

Chapter 2, Project Description

As a staff-initiated text change, DEIR page 2-5, paragraphs 2 and 3 have been revised:

San Pablo Reservoir has a surface area of 834 acres and a shoreline length of about 14 miles. The reservoir serves four water supply functions: emergency standby storage, regulation of Mokelumne Aqueduct supply, conservation/storage of local runoff from Bear and San Pablo Creeks, and raw water source for the Sobrante and San Pablo WTPs. Storage of flow from upstream reaches of San Pablo Creek provides flood ~~control~~ protection benefits to areas downstream of the reservoir. The reservoir also provides recreation opportunities such as fishing, boating, picnicking, nature study, and hiking. Trails in the reservoir area interconnect with other regional trail systems.

Figures 2-3 and 2-4 display the general site plan of San Pablo Dam, including the existing dam, access roads, and surrounding features; **Figure 2-5** shows typical cross-sections of the existing dam and buttresses. San Pablo Dam was constructed on San Pablo Creek between 1917 and 1921, almost entirely as a hydraulic fill dam with a clay “puddle” core. Weathered sandstones and shales taken from the hills adjacent to the abutments were used to construct the dam. With the exception of the core trench, the dam is founded on alluvial sediments associated with the San Pablo Creek drainage. The alluvial deposits are as much as 100 feet thick. A cutoff trench, approximately 10 feet wide and centered about 50 feet downstream of the embankment centerline, was excavated to bedrock and backfilled with clayey material before the hydraulic fill process began. The elevation of the dam and the spillway crests are approximately 329 feet and 314 feet, respectively. The normal freeboard¹ at maximum water level is about 15 feet; the water level is currently restricted to 294 feet or less under normal operating conditions. However, it is noted that a large storm event could require a short-term increase in water level ~~to control downstream flows and prevent potential downstream flooding~~. Water levels would be reduced to 294 feet or less as soon as possible following such a storm event. The reservoir capacity at the spillway crest elevation is about 38,600 acre-feet (Geomatrix, 2004, 2005).

As a staff-initiated text change, DEIR Figure 2-10 (page 2-19) has been revised, as follows.

In response to Comment H-1, Comment M-1, and as a staff-initiated text change, DEIR page 2-19, paragraph 4 has been revised:

San Pablo Dam Road Access

Construction of the proposed project would require access to the main work areas downstream of the dam from San Pablo Dam Road, as shown on **Figure 2-11**. A main gate would be set up on the existing EBMUD access road to control traffic flow in and out of the site. Public access to Kennedy Grove Regional Recreation area via the existing EBMUD access road would be closed to the public Monday through Friday. On weekends,

¹ Freeboard is the vertical distance between the highest water level and the dam crest.

INSERT REVISED FIGURE 2-10 Proposed Construction Work Areas

public access along the road would be allowed, with traffic control, such as the use of flaggers to direct traffic. In addition, the EBMUD lower dam access road would be open to the public on the Friday of the Bay Area Storytelling Festival Weekend, held in May on the weekend before Memorial Day weekend. Signs would be posted indicating the access road closure schedule and alternate routing for recreational access and opportunities (including access routes via Hillside Drive and a listing of alternate recreation areas). A public outreach program would be developed to inform park users of the Kennedy Grove access schedule (e.g., flyers available at park kiosks, communication with groups that routinely use the park on weekdays). In addition, closure notification would be posted on the EBMUD website.

As a staff-initiated text change, DEIR Figure 2-11 (page 2-20) has been revised, as follows.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures

In response to Comment H-5, DEIR page 3.3-16, paragraph 1 has been revised:

Impact 3.3-1: Short-term visual effects experienced from nearby areas during project construction.

Construction activities associated with the proposed project would require earthwork, stockpiling of material, and the use of heavy equipment. During the construction period, the following work areas and activities, shown on **Figure 2-11** in Chapter 2, could be visible from adjacent areas:

- Construction stockpiling downstream of the dam, with typical temporary stockpiles that are about 50 feet high
- CDSM treatment (see **Figure 3.3-11** for views of typical CDSM equipment and activities)
- Cement grout batching plant
- Borrow area excavation at Scow Canyon
- Borrow material transfer from Scow Canyon
- Construction vehicles entering and leaving the site
- Site restoration and vegetation re-establishment
- Other construction activities

**INSERT REVISED FIGURE 2-11 Proposed Work Areas
Downstream of Dam**

As a staff-initiated text change, DEIR page 3.3-18, paragraph 2 has been revised:

Measure 3.3-1: EBMUD will install interpretive signage to explain the engineering and environmental principles related to the seismic improvements underway at San Pablo Dam. The interpretive material will be presented in an attractive and easy to understand graphic display. With EPRPD approval, signage locations could include, but would not be limited to, areas near the Kennedy Grove entry kiosk and trails.

As a staff-initiated text change, DEIR page 3.5-1, paragraph 4 has been revised:

The San Pablo Reservoir has a surface area of 834 acres and a shoreline length of about 14 miles. It serves four water supply functions: emergency standby storage, reregulation of Mokelumne Aqueduct supply, conservation/storage of local runoff from Bear and San Pablo Creeks, and a source of raw water for the Sobrante and San Pablo WTPs. In addition, the reservoir provides flood ~~control functions~~ protection benefits as well as recreation opportunities such as fishing and boating, picnicking, nature study, and hiking. Trails in the reservoir area interconnect with other EBMUD trails and the Tilden Regional Park system.

As a staff-initiated text change, DEIR page 3.5-2, paragraph 4 has been revised:

The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping program, designates areas where urban flooding could occur during 100-year and 500-year flood events.² Most of the project site is located in an area designated as Flood Hazard Area C (areas of minimal flooding) and not in the 100-year or 500-year floodplain (FEMA, 2001). The reservoir itself is designated as Zone A, which is an area within the 100-year flood zone where flood hazard factors have not been determined. However, the reservoir also provides flood ~~control functions~~ protection benefits by retaining flood flows and attenuating flooding potential downstream of the dam. Flooding due to dam failure can be the most destructive type of flooding due to the severity of the force associated with the sudden release of a large volume of water. A dam failure is usually the result of neglect, poor design, or structural damage caused by a major event such as an earthquake. The California Division of Safety of Dams (DSOD) oversees the construction, enlargement, alteration, repair, or removal of existing dams. As a result of recent studies regarding the dynamic stability of the dam, it was determined that the dam could be susceptible to failure during a significant earthquake (Geomatrix, 2004).

As a staff-initiated text change, DEIR page 3.6-16, paragraph 3 has been revised:

Special-Status Birds

Trees and shrubs in woodland, riparian, and scrub habitats and grassland on the project site provide nesting, foraging, and wintering habitat for various special-status bird species. Raptors such as Cooper's hawk, sharp-shinned hawk, red-tailed hawk, red-shouldered hawk, golden eagle, northern harrier, white-tailed kite, and prairie falcon may nest and

² A 100-year flood event has a 1 percent probability of occurring in a single year. Although infrequent, 100-year floods can occur in consecutive years or periodically throughout a decade. A 500-year flood event has a 0.2 percent probability of occurring in a single year.

forage in the project area. In addition, American peregrine falcon, merlin, long-eared owl, and short-eared owl may forage and/or winter in the San Pablo Reservoir area. Bald eagles winter in the project area, roosting in eucalyptus and Monterey pines and foraging on fish in the reservoir (EBMUD, 2005). A bald eagle nest was observed within the eastern San Pablo Reservoir Area approximately 3/4 of a mile from the project site in 2006 (Hartwell, 2006c). With the exception of this observation, bald eagles have not been documented nesting in Contra Costa County in recent memory. Ospreys also forage on fish and roost in the San Pablo Reservoir area year-round. Although not known to nest at San Pablo Reservoir, at least one pair is believed to nest near Briones Reservoir. Although the grassland habitats in the project area appear suitable for burrowing owl, poisoning programs have eliminated California ground squirrels from this part of Contra Costa County (Hartwell, 2006a). The loss of California ground squirrel burrows effectively eliminated an essential habitat element for burrowing owls, which depend primarily on ground squirrels to develop the burrows they inhabit. Since ground squirrels are absent from the project area, it is assumed that burrowing owls are also not present.

In response to Comment C-2, DEIR page 3.6-23, paragraph 5 has been revised:

The project site supports oaks, willows, and other trees protected by Contra Costa County's Tree Protection Ordinance (i.e., at least 6.5 inches in diameter at breast height). Construction of the dam, and Scow Canyon fire trail widening, and clearing and grading of the borrow area would result in the removal of protected trees. In addition, construction activities within or adjacent to protected trees could adversely affect the root zones of these trees, resulting in tree damage or mortality. This would be a significant impact. Implementation of Measures 3.6-1a through 3.6-1d would reduce this impact to a less-than-significant level.

In response to Comment C-2, DEIR page 3.6-24, paragraph 3 has been revised:

Measure 3.6-1d: EBMUD will develop and implement a five-year tree monitoring program for upland species and a ten-year monitoring program for riparian species. Appropriate performance standards may include, but are not limited to: an 80 75 percent survival rate of tree plantings and the demonstrated ability to be self-sustaining at the end of five years for upland species and ten years for riparian species.

In Response to Comment C-3, DEIR pages 3.6-25 and 3.6-26, Mitigation Measure 3.6-2b, 2nd paragraph has been revised:

EBMUD will compensate for wetland and stream impacts in the construction area downstream of San Pablo Dam at a ratio of 2:1 (or at a ratio agreed upon by the wetland permitting agencies) by creating or restoring wetland and aquatic habitat at an agency-approved location on nearby EBMUD lands. EBMUD will develop and implement a five-year wetland mitigation and monitoring program for onsite and offsite mitigation. Appropriate performance standards may include, but are not limited to: an 80 75 percent survival rate of restoration plantings; absence of invasive plant species; and a viable, self-sustaining creek or wetland system at the end of five years.

As a staff-initiated text change, DEIR page 3.6-32, paragraph 6 has been revised:

Impact 3.6-6: Impacts to Alameda whipsnake.

The project area is located within USFWS proposed critical habitat for Alameda whipsnake. Coastal scrub, woodland, and grassland habitats within the proposed borrow area, fire trail, and construction area downstream of San Pablo Dam may support this species. Grading and other construction activities in these areas could result in harassment due to noise or vibration, entrapment in trenches, temporary and permanent habitat removal, or other harm (including direct mortality) of Alameda whipsnakes. Construction and maintenance of the fire trail and vehicle and heavy equipment traffic on this road throughout the duration of the project would result in removal of 18.88 acres of high-quality coastal scrub habitat and could result in injury or mortality of Alameda whipsnakes traveling through this area. Seismic upgrade of the San Pablo Dam would remove approximately ~~12.08~~ 47.85 additional acres of grassland, coastal scrub, and open oak woodland proposed as critical habitat for this species downstream of San Pablo Dam and within the borrow area. Approximately ~~5.90~~ 14.43 acres of this habitat removal would be permanent. These impacts would be significant. Implementation of Measure 3.6-6 would reduce impacts to Alameda whipsnake to a less-than-significant level.

In response to Comment A-2, DEIR page 3.6-33, paragraph 2 has been revised:

Measure 3.6-6: EBMUD will ensure that construction-related impacts to individual Alameda whipsnakes are minimized and/or avoided through the development and implementation of an Alameda whipsnake protection and monitoring plan. This plan will be approved by CDFG during CESA consultation and by the USFWS during formal consultation under Section 7 of FESA and will establish a program of preconstruction surveys and construction supervision to identify and prevent potential hazards to individual Alameda whipsnakes that could be present during construction. The plan will prohibit or restrict activities that could harm or harass this species. Habitat restoration and compensation is also included in the plan. Measures in this plan will include, but are not limited to, the following:

As a staff-initiated text change, DEIR page 3.6-36, paragraph 3 has been revised:

Impact 3.6-9: Impacts to bald eagle and other wintering special-status birds.

As discussed above, American peregrine falcon, merlin, long-eared owl, and short-eared owl may forage and/or winter in the San Pablo Reservoir area. Bald eagles winter in the vicinity of the project site, roosting in eucalyptus and Monterey pines and foraging on fish in the reservoir. Though one bald eagle nest was observed within the eastern San Pablo Reservoir Area, east of the project site in 2006 (Hartwell, 2006c), this is the only nesting occurrence documented in Contra Costa County in recent memory and this species is not expected to occur in the vicinity of the project site. Additional bird species with the potential to use San Pablo Reservoir and surrounding habitat for foraging and/or wintering

include common loon, California gull, American white pelican, double-crested cormorant, and rufous hummingbird.

In response to Comment L-3, DEIR page 3.8-1, paragraph 4 has been revised:

Local Roadways

San Pablo Dam Road–Camino Pablo runs between El Sobrante (and I-80) and Orinda (and SR 24), changing names at Wildcat Canyon Road / Bear Creek Road. It has two travel lanes in the project area (widening to four lanes at Trailside Drive, about 0.5 mile north of the EBMUD access road serving the dam and Kennedy Grove Recreation Area), with separate left-turn and right-turn lanes at the unsignalized main access intersection. In addition to carrying vehicular traffic, San Pablo Dam Road is popular among recreational bicyclists.

In response to Comment L-2, DEIR page 3.8-2, footnote 1 had been revised:

Estimated daily traffic volume is based on automatic machine counts conducted on Thursday and Friday, ~~July 9 and 10, July 7 and 8,~~ 2005, and Saturday, August 13, 2005.

In response to Comment I-17, DEIR page 3.11-7 and 3.11-8, Mitigation Measure 3.11-3, has been revised:

Measure 3.11-3a: Regulations governing the use of construction equipment in fire-prone areas are designed to minimize the risk of wildland fires during construction activity. In accordance with the Public Resources Code, the construction contractor would be required to comply with the following legal requirements during construction activities for the proposed project:

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period – from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

Measure 3.11-3b: EBMUD will coordinate fire protection needs during project construction with local fire protection agencies, which could include the Contra Costa

County Fire Protection District, the Richmond Fire Department, and the Moraga-Orinda Fire District.

Significance after Mitigation: Less-than-significant.

Chapter 4, Cumulative Impacts

As a staff-initiated text change, DEIR page 4-4, item N-17, column 4 has been revised:

Construct San Pablo Dam Road improvements and widening from Appian Way to just south of Castro Ranch Road~~Richmond city limits.~~

Chapter 5, Analysis of Alternatives

As a staff-initiated text change, DEIR page 5-8, paragraph 4 has been revised:

Decommission of San Pablo Dam would preclude any seismic deformation of the dam. The reservoir would be drained, dam facilities would be removed, and San Pablo Creek flow would be restored. New flood ~~control~~ protection measures features would be required to protect downstream land uses from ~~uncontrolled~~ unprotected flow through the San Pablo Reservoir area. Water-based recreation would no longer be available. However, watershed grazing and land-based recreation opportunities could be enhanced.

As a staff-initiated text change, DEIR page 5-9, paragraph 2 has been revised:

5.5.3 Addition of Flood ~~Control~~ Protection Measures features

EBMUD considered whether the San Pablo Dam Seismic Upgrade should include ~~increased~~ flood ~~control~~ protection as part of the proposed project, such as increased spillway capacity or the addition of ~~and increased~~ flood storage capacity. In evaluating these potential additional flood ~~control~~ protection measures, it was determined that the existing spillway is already capable of passing flows generated by the probable maximum flood³ event, and that including ~~increasing~~ flood storage capacity as part of the proposed project would result in an increase in environmental impacts. Such impacts would include additional flooding of the upstream creek environment in Orinda and elsewhere and the associated impacts to riparian vegetation and habitat, as well as an increase in impacts to shoreline recreation, including access and the possible inundation and required relocation of other facilities. ~~Increased~~ Adding flood storage capacity would not actually reduce the occurrence of downstream flooding, since the downstream areas are prone to flooding even when releases from San Pablo Reservoir are minimal.⁴ In addition, the inclusion of ~~additional~~ flood ~~control~~ protection measures features would increase project construction requirements and would not eliminate the need for any of the proposed project measures

³ The probable maximum flood is the flood that can be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in a region.

⁴ Downstream flooding occurs almost every year, even though San Pablo Reservoir has spilled only about a dozen times since its construction in 1920.

~~features~~. Therefore, the addition of flood ~~control~~ protection measures ~~features~~ to the proposed project would add to, not avoid or substantially lessen, the significant effects of the project, and these measures ~~features~~ would not in and of themselves address any of the basic project objectives.

Appendices

As a staff-initiated text change and in response to Comment I-19, DEIR page A-1, has been revised to include a new paragraph 4:

In addition to the NOP scoping outreach, EBMUD made numerous project presentations, including informal project updates during meetings of the San Pablo, Pinole, Richmond, and Rodeo Chambers of Commerce; the Rodeo and El Sobrante Municipal Advisory Councils, and the West Contra Costa County Mayors and Supervisors Association. Additional presentations include:

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|---|---------------------------|
| ▪ <u>Richmond Pinole Lions Club</u> | <u>July 20, 2005</u> |
| ▪ <u>Sons in Retirement, Branch 148</u> | <u>September 28, 2005</u> |
| ▪ <u>El Cerrito Chamber of Commerce</u> | <u>November, 22, 2005</u> |
| ▪ <u>Orinda Rotary</u> | <u>November 30, 2005</u> |
| ▪ <u>El Sobrante Realtors Organization</u> | <u>January 13, 2006</u> |
| ▪ <u>San Pablo Rotary Club</u> | <u>February 15, 2006</u> |
| ▪ <u>Ward 1 Breakfast for West County</u> | <u>March 23, 2006</u> |
| ▪ <u>Sons in Retirement, Branch 73</u> | <u>April 12, 2006</u> |
| ▪ <u>West County Business and Professionals Association</u> | <u>April 18, 2006</u> |
| ▪ <u>El Sobrante Rotary Club</u> | <u>April 18, 2006</u> |